

THE CLAIMS:

1.-11. (Canceled)

12. (Previously Presented) A method of stabilizing shale in a subterranean formation comprising the step of injecting an additive into the formation comprising a polymer based on an olefinically unsaturated hydrocarbon with alkylene oxide based side chains.

13. (Previously Presented) The method of claim 12 wherein the polymer is a copolymer of an olefinically unsaturated hydrocarbon and an ethylenically unsaturated carboxylic acid, carboxylic acid salt or carboxylic acid anhydride with alkylene oxide based side chains.

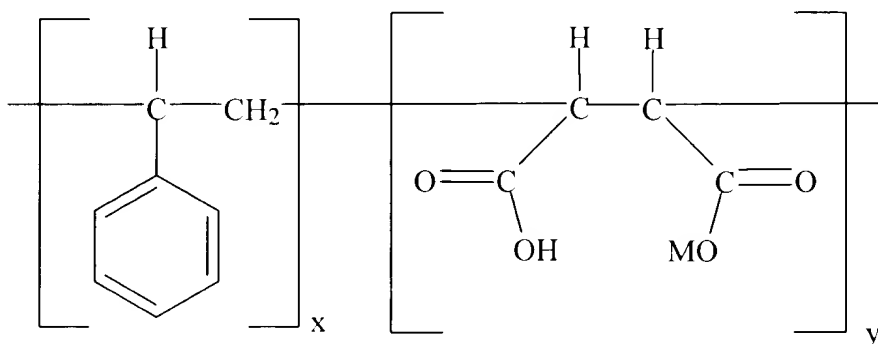
14. (Previously Presented) The method of claim 12, wherein the polymer is a copolymer of styrene derivative and maleic anhydride with alkylene oxide based side chains.

15. (Previously Presented) The method of claim 12, wherein the polymer has a molecular weight of from 5000 g / mol to 100,000 g/mol.

16. (Previously Presented) The method of claim 12, wherein the weight of the alkylene oxide based side chains is above 200 g/mol.

17. (Previously Presented) The method of claim 12, wherein the number of alkoxyates in the polymer side chain is up to 60 units.

18. (Previously Presented) The method of claim 12, wherein the polymer has the molecular structure:



wherein M in each occurrence independently is hydrogen or $-\text{[CH}_2\text{-CHR-O]}_n\text{-CH}_3$ with R being CH_3 or $\text{CH}_2\text{-CH}_3$ or hydrogen, with the proviso that at least some of the radicals M have the meaning of $-\text{[CH}_2\text{-CHR-O]}_n\text{-CH}_3$, n is from 3 to 70, and x and y each independently are from 1 to 100.

19. (Previously Presented) The method of claim 14, wherein the residual maleic anhydride groups in the polymer are hydrolyzed.

20. (Previously Presented) The method of claim 12 wherein the additive is added to a wellbore drilling or service fluid.

21. (Previously Presented) The method of claim 20 wherein the wellbore fluid is water based.
